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10/595,222

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Marc Vuilliomenet

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GRIFFIN & SZIPL, PC
SUITE PH-1
2300 NINTH STREET, SOUTH
ARLINGTON, VA 22204

EXAMINER

SMITH, RICHARD A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|---------------------------------------|--|--|
| Office Action Summary | Application No. 10/595,222 | Applicant(s) VUILLIOMENET ET AL. | |
| | Examiner R. Alexander Smith | Art Unit 2841 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 14-21 and 23-26 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20061103</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 19, 22 and 23 are objected to because of the following informalities:

Claim 19:

- (a) "the areas" in line 1 appears to lack a proper antecedent from claim 14. See lines 7-8 of claim 14.
- (b) "the area" in line 3 lacks antecedent basis.

Claim 22: "said stem" in line 3 lacks antecedent basis.

Claim 23: "said index" in line 2 lacks antecedent basis.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was

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made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 14, 15, 19, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,603,283 to Owen.

Owen discloses a micromotor for indicator hand device including:

a case (52) inside which are housed motor means (54) and means (56 and 60) provided for transmitting the movement from said motor means to a drive shaft (26) with an axis X1 capable of driving an indicator hand (12), said case including a first face (the upper part of housing 52, column 2 lines 10-11) including an aperture making said drive shaft accessible and a second face (the lower part) opposite said first face, the distance separating said first face from said second face defining a maximum thickness E1 of said case, said first and second faces being connected to each other by at least one lateral face (where arrow 52 points), wherein said case has an area of thickness E2 (along the drive shaft) that is smaller than said maximum thickness E1 so as to define an open recess (which accommodates the lamp 78) in said second face in claim 14,

wherein said recess is arranged in an area of said second face at least partly located opposite said drive shaft (as shown) in claim 15, and

wherein the areas of said case have a thickness substantially equal to said maximum thickness E1 correspond to a first volume area of the interior of the case in which said motor means are arranged, whereas the area of the case located substantially opposite said recess

corresponds to a second volume area of the interior of the case in which said drive shaft is arranged (as shown) in claim 19.

Owen discloses an indicator device including said micromotor mounted on a printed circuit board (24), and when said micromotor is mounted on said printed circuit board by the second face thereof, wherein at least one component (80 and 78) is arranged on said printed circuit board while being at least partially arranged in said recess in claims 24 and 25.

Owen further discloses

said second face of the case including an aperture (62) arranged substantially opposite said axis X1 of the hollow shaft,

wherein said case includes a bottom defining said second face and closed by a cover (as disclosed above), said cover defining said first face, the bottom having at least one setback forming said recess (as shown),

mechanical means (figures 4-6) allowing said hand to be disassembled a plurality of times from the shaft without either of the latter elements undergoing damage rendering said elements unfit for use,

said mechanical means including in particular a ring (28) secured to said index of said hand, said ring being arranged concentrically around the base of said index of the hand and having a substantially greater diameter than the external diameter of said shaft (at 39 as shown in figures 5-6 and since substantially is a relative term).

Owen does not disclose said recess also being open on said lateral face.

With respect to the recess being open on the lateral face: Owen discloses a two dimensional cross-sectional view across the motor, the gears and the shaft but does not provide an overall view of the housing (52) nor discusses the recess per se in the specification. However, the recess being open on the lateral face is only considered to be an obvious modification of a housing because the courts have held that a change in shape or configuration, without any criticality, is within the level of skill in the art as the particular shape claimed by Applicant is nothing more than one of numerous shapes that a person having ordinary skill in the art will find obvious to provide. In re Dailey, 149 USPQ 47 (CCPA 1976). In this case to reduce the amount of material used in the making the housing, or to strengthening the housing, or to allow direct observation of the board, lamp and shaft area under the housing once the housing is mounted.

4. Claims 16, 17, 18, 21, 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owen in view of US 5,706,757 to Hashimoto et al.

Owen teaches all that is claimed as discussed in the above rejections of claims 14, 15, 19, 24 and 25 except for

said drive shaft is hollow in claim 16,

the micromotor further includes a support arranged in the area of said aperture for receiving a light source, the total thickness of the case and said light source support being less than or equal to the maximum thickness E1 of the case in claim 17, and

when said drive shaft is hollow, wherein said component includes a light source, the indicator device further including an indicator hand including a transparent stem, the later being housed in said drive shaft in claim 26.

Hashimoto et al. discloses an indicator device with a micrometer, wherein the drive shaft is hollow (figures 1, 2, 4 and 5) and the indicator hand including a transparent stem (at 9a in figure 1, at 14a in figure 2, and at 21a in figures 4 and 5), in order to improve light transmission efficiency (column 2 lines 12-25) and the motor having a support for receiving the light source (20a in figure 4, 23a in figure 5), wherein the total thickness is less or equal to the maximum E1. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the lamp and its support, taught by Owen, by replacing it to include a support and LED light source, as taught by Hashimoto et al., in order to utilize a long lasting, cheap, and low powered light source, and it would have been obvious to one of ordinary skill in the art at the time of the invention to make the shaft hollow, as suggested by Hashimoto et al., in order to improve light transmission efficiency.

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Owen in view of DE 199 38 366 to Sauter.

Owen teaches all that is claimed as discussed in the above rejections of claims 14, 15, 19, 24 and 25 except for said second face of the case includes at least one foot for positioning and/or securing the case on a support.

Sauter discloses the mounting face having plural feet (the larger unmarked projections shown in figure 1) for position and/or securing the case on the board (as shown in figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the second face (for housing 52) which is against the board (24), taught by Owen, to include at least one foot, as suggested by Sauter, in order to properly position and secure the housing on the board.

Allowable Subject Matter

6. Claim 22 would be allowable if rewritten to overcome the claim objections set forth in this Office Action and to include all of the limitations of the base claim and any intervening claims.

7. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related micromotors and indicating devices.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Alexander Smith whose telephone number is 571-272-2251. The examiner can normally be reached on Monday through Friday from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A. Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R.A.Smith/

May 15, 2008

R. Alexander Smith
Primary Examiner Art Unit 2841